IN THE CLAIMS

Please amend the claims to read as indicated herein.

1. (currently amended) A method for correcting a measured signal transmitted through a system, ~~the~~ said method comprising:

sampling ~~the~~ said measured signal to yield a sampled signal ~~sequence,~~ sequence;

~~providing a signal series as a plurality of the sampled signal sequences put together successively;~~

reproducing said sampled signal sequence to yield a plurality of copies of said sampled signal sequence;

appending said plurality of copies to one another to yield a signal series;

windowing ~~the~~ said signal series with a window function, to yield a windowed signal series; and

recalculating a corrected measured signal from ~~the~~ said windowed signal series using information about ~~the~~ a frequency-dependency of ~~the~~ said system.

2. (currently amended) The method of claim 1, wherein said recalculating a corrected measured signal from ~~the~~ said windowed signal further comprises:

transforming ~~the~~ said windowed signal series from a time domain into a frequency domain, to yield a transformed signal series;

modifying ~~the~~ said transformed signal series with a transfer function as a function of frequency of ~~the~~ said system, ~~preferably by multiplying the transformed signal series with the inverse transfer function of the system,~~ to yield a modified transformed signal series;

re-transforming ~~the~~ said modified transformed signal series back from ~~the~~ said frequency domain into ~~the~~ said time domain, to yield a re-transformed signal series; and

receiving ~~the~~ said corrected measured signal from ~~the~~ said re-transformed signal series.

3. (currently amended) The method of claim 1, wherein said recalculating a corrected measured signal from ~~the~~ said windowed signal further comprises modifying ~~the~~ said corrected measured signal with a function inverse to ~~the~~ said window function.

4. (currently amended) The method of claim 2, wherein said receiving ~~the~~ said corrected measured signal from ~~the~~ said re-transformed signal series further comprises selecting a corrected

signal sequence from said re-transformed signal series substantially corresponding to the said sampled signal sequence.

5. (currently amended) The method of claim 4, wherein the said selected corrected signal sequence is selected substantially from a middle range of the said re-transformed signal series.

6. (currently amended) The method according to claim 1, wherein said sampling the said measured signal is executed by a measuring device at the a highest accuracy provided by said measuring device.

7. (currently amended) A method for correcting a measured signal transmitted through a system having a transfer function as a function of frequency, the said method comprising:

    sampling the said measured signal to yield a sampled signal sequence, sequence;

    providing a signal series as a plurality of the sampled signal sequences put together successively,

    reproducing said sampled signal sequence to yield a plurality of copies of said sampled signal sequence;

    appending said plurality of copies to one another to yield a signal series;

    windowing the said signal series with a window function, function to yield a windowed signal series;

    transforming the said windowed signal series from a time domain into a frequency domain, to yield a transformed signal series;

    modifying the said transformed signal series with the said transfer function of the said system, preferably by multiplying the transformed signal series with the inverse transfer function of the system, to yield a modified transformed signal series;

    re-transforming the said modified transformed signal series back from the said frequency domain into the said time domain, to yield a re-transformed signal series; and

    receiving a corrected measured signal from the said re-transformed signal series.

8. (currently amended) A method for providing a measured signal for further processing, the said method comprising:

    sampling the said measured signal to yield a sampled signal sequence, and;

    providing a signal series as a plurality of the sampled signal sequences put together successively

reproducing said sampled signal sequence to yield a plurality of copies of said sampled signal

sequence;

appending said plurality of copies to one another to yield a signal series; and

processing said signal series to determine a characteristic of said measured signal.

9. (currently amended) A software program storable on a data carrier, for executing a method
when operated in a computer system, said method comprising:

sampling ~~the~~ said measured signal to yield a sampled signal ~~sequence,~~ sequence;

~~providing a signal series as a plurality of the sampled signal sequences put together successively;~~

reproducing said sampled signal sequence to yield a plurality of copies of said sampled signal

sequence;

appending said plurality of copies to one another to yield a signal series;

windowing ~~the~~ said signal series with a window function,~~,~~ to yield a windowed signal series; and

recalculating a corrected measured signal from ~~the~~ said windowed signal series using information

about ~~the~~ a frequency-dependency of ~~the~~ said system.

10. (currently amended) An apparatus for executing a method for correcting a measured signal,
said apparatus comprising:

a ~~measuring~~ sampling device for sampling ~~the~~ said measured signal to yield a sampled signal

~~sequence,~~ sequence;

a signal multiplication unit for ~~providing a signal series as a plurality of the sampled signal~~

~~sequences put together successively,~~ reproducing said sampled signal sequence to yield a

plurality of copies of said sampled signal sequence, and appending said plurality of copies

to one another to yield a signal series;

a device for performing windowing functions for windowing the signal series with a window

function,~~,~~ to yield a windowed signal series; and

a recalculation unit for recalculating a corrected measured signal from ~~the~~ said windowed signal

series using information about ~~the~~ a frequency-dependency of ~~the~~ said system.

11. (currently amended) An apparatus for correcting a measured signal transmitted through a
system comprising:

means for sampling ~~the~~ said measured signal to yield a sampled signal ~~sequence,~~ sequence;

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~~means for providing a signal series as a plurality of the sampled signal sequences put together successively,~~

means for reproducing said sampled signal sequence to yield a plurality of copies of said sampled signal sequence;

means for appending said plurality of copies to one another to yield a signal series;

means for windowing ~~the~~ said signal series with a window function,~~,~~ to yield a windowed signal series; and

means for recalculating a corrected measured signal from ~~the~~ said windowed signal series using information about ~~the~~ a frequency-dependency of ~~the~~ said system.

12. (previously presented) The method of claim 1, wherein said measured signal is a high speed digital pulse.

13. (previously presented) The method of claim 7, wherein said measured signal is a high speed digital pulse.

14. (previously presented) The method of claim 8, wherein said measured signal is a high speed digital pulse.

15. (previously presented) The apparatus of claim 11, wherein said measured signal is a high speed digital pulse.